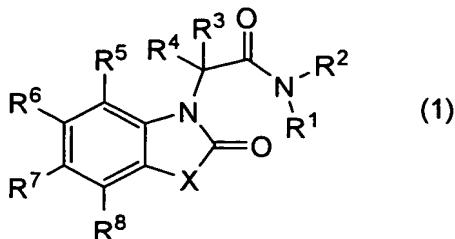


## CLAIMS

1. An antianxiety or antidepressant agent comprising a compound of the formula (1):



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wherein R<sup>1</sup> and R<sup>2</sup> are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, an optionally substituted heteroaryl group, or an optionally substituted saturated heterocyclic group, or R<sup>1</sup> and R<sup>2</sup> combine together with the adjacent nitrogen atom to which they bond, and form an optionally substituted saturated heterocyclic group;

10

R<sup>3</sup> and R<sup>4</sup> are independently a hydrogen atom, a halogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group;

15

R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a halogen atom, a cyano group, a nitro group, a hydroxy group, an optionally substituted amino group, an optionally substituted alkoxy group, an optionally substituted alkanoyl group, an optionally substituted alkoxy carbonyl group, an optionally substituted aryloxycarbonyl group, an optionally substituted heteroaryloxycarbonyl group, a carboxyl group, an optionally substituted carbamoyl group, an optionally substituted sulfamoyl group, an optionally substituted ureido group, an optionally substituted alkylthio group, an optionally substituted alkylsulfinyl group, an optionally substituted alkylsulfonyl group, or a group of the formula: -E-A (in which E is a single bond, an

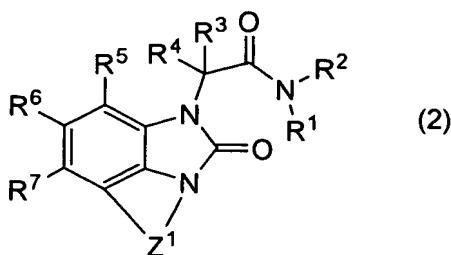
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oxygen atom, a sulfur atom,  $\text{-SO}_2$ ,  $\text{-SO}_2\text{-}$ ,  $\text{-NR}^9\text{-}$  or  $\text{-CO-}$ , A is an optionally substituted aryl group or an optionally substituted heteroaryl group, and  $\text{R}^9$  is a hydrogen atom or an optionally substituted alkyl group);

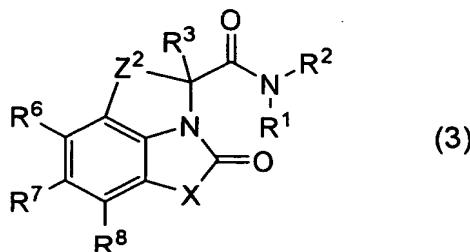
- 5           X is an oxygen atom, a sulfur atom,  $\text{NR}^{10}$ , or  $\text{CR}^{11}\text{R}^{12}$  (in which  $\text{R}^{10}$  is a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted alkanoyl group, or an optionally substituted alkoxycarbonyl group,  $\text{R}^{11}$  and  $\text{R}^{12}$  are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, an optionally substituted heteroaryl group, a halogen atom, a cyano group, a hydroxy group, an optionally substituted amino group, an optionally substituted alkoxy group, an optionally substituted aryloxy group, an optionally substituted alkanoyl group, an optionally substituted aroyl group, an optionally substituted heteroarylcyclon group, an optionally substituted alkoxycarbonyl group, a carboxyl group, or an optionally substituted carbamoyl group, or  $\text{R}^{11}$  and  $\text{R}^{12}$  combine each other and form an oxo group or  $=\text{NOH}$ );
- 10           alternatively,
- 15           (i)       when X is  $\text{NR}^{10}$ , then by combining  $\text{R}^8$  and  $\text{R}^{10}$ , the formula (1) may be expressed by the formula (2):
- 20



- 25           wherein  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^5$ ,  $\text{R}^6$  and  $\text{R}^7$  are as defined above, and  $\text{Z}^1$  is an optionally substituted alkylene group, and one of the carbon atoms of said alkylene group can be replaced by an oxygen atom, a sulfur atom or  $\text{-NR}^{13}\text{-}$  (in which  $\text{R}^{13}$  is a hydrogen atom or an optionally substituted alkyl group), and a double bond may be formed between any adjacent
- 30

atoms of said alkylene group;

(ii) by combining R<sup>4</sup> and R<sup>5</sup>, the formula (1) may be expressed by the formula (3):



5 wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and X are as defined above, Z<sup>2</sup> is an optionally substituted alkylene group, and one of the carbon atoms of said alkylene group can be replaced by an oxygen atom, a sulfur atom or -NR<sup>13</sup>- (in which R<sup>13</sup> is a hydrogen atom or an optionally substituted alkyl group), and a double bond may be formed between any adjacent atoms of said alkylene group;

10 provided that

15 (1) when X is an oxygen atom or a sulfur atom under the following conditions (a) or (b), then R<sup>1</sup> and R<sup>2</sup> never form an optionally substituted saturated heterocyclic group by combining together with the adjacent nitrogen atom to which they bond;

(a) all of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are a hydrogen atom;

(b) one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, and the remaining groups are a hydrogen atom;

20 (2) when X is CR<sup>11</sup>R<sup>12</sup>, and R<sup>11</sup> and R<sup>12</sup> are independently an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group under the following conditions (a) or (b), then R<sup>1</sup> and R<sup>2</sup> are not a hydrogen atom nor an optionally

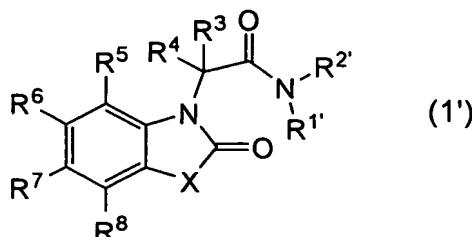
25 substituted alkyl group, or R<sup>1</sup> and R<sup>2</sup> never form an optionally substituted saturated heterocyclic group by combining together with the adjacent nitrogen atom;

(a) all of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are a hydrogen atom;

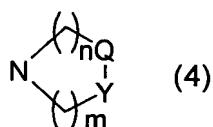
30 (b) one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, an optionally substituted alkyl group or

a nitro group, and the remaining groups are a hydrogen atom, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

2. A compound of the formula (1'):



- 5       wherein R<sup>1'</sup> and R<sup>2'</sup> are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, an optionally substituted heteroaryl group, or an optionally substituted saturated heterocyclic group, or R<sup>1'</sup> and R<sup>2'</sup> combine together with the adjacent nitrogen atom to which they bond, and form a group of the formula (4):
- 10



- 15       (in which n is 0 or 1, m is 1, 2 or 3, Y is a single bond, an oxygen atom or a sulfur atom, Q is methylene, ethylene, or an optionally substituted o-phenylene group);

R<sup>3</sup> and R<sup>4</sup> are independently a hydrogen atom, a halogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group;

- 20       R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a halogen atom, a cyano group, a nitro group, a hydroxy group, an optionally substituted amino group, an optionally substituted alkoxy group, an optionally substituted alkanoyl group, an optionally substituted alkoxy carbonyl group, an optionally substituted aryloxycarbonyl group, an optionally substituted heteroaryloxycarbonyl
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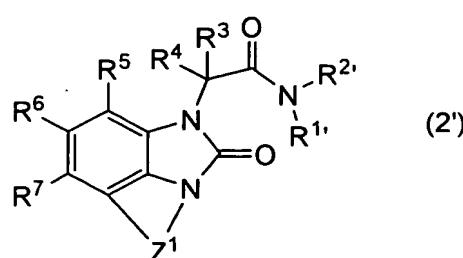
group, a carboxyl group, an optionally substituted carbamoyl group, an optionally substituted sulfamoyl group, an optionally substituted ureido group, an optionally substituted alkylthio group, an optionally substituted alkylsulfinyl group, an optionally substituted alkylsulfonyl group, or a group of the formula: -E-A (in which E is a single bond, an oxygen atom, a sulfur atom, -SO-, -SO<sub>2</sub>-, -NR<sup>9</sup>- or -CO-, A is an optionally substituted aryl group or an optionally substituted heteroaryl group, and R<sup>9</sup> is a hydrogen atom or an optionally substituted alkyl group);

10           X is an oxygen atom, a sulfur atom, NR<sup>10</sup>, or CR<sup>11</sup>R<sup>12</sup> (in which R<sup>10</sup> is a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted alkanoyl group, or an optionally substituted alkoxy carbonyl group, R<sup>11</sup> and R<sup>12</sup> are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, an optionally substituted heteroaryl group, a halogen atom, a cyano group, a hydroxy group, an optionally substituted amino group, an optionally substituted alkoxy group, an optionally substituted aryloxy group, an optionally substituted alkanoyl group, an optionally substituted aroyl group, an optionally substituted heteroaryl carbonyl group, an optionally substituted alkoxy carbonyl group, a carboxyl group, or an optionally substituted carbamoyl group, or R<sup>11</sup> and R<sup>12</sup> combine and form an oxo group or =NOH);

15           Alternatively,

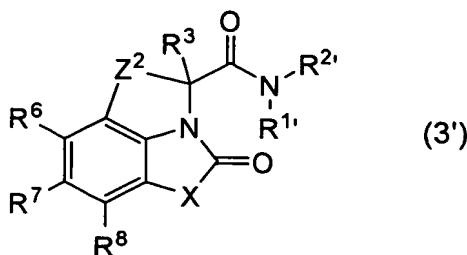
20           (i)       when X is NR<sup>10</sup>, then by combining R<sup>8</sup> and R<sup>10</sup>, the formula (1') may be expressed by the formula (2'):

25



wherein R<sup>1'</sup>, R<sup>2'</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are as defined above, Z<sup>1</sup> is an optionally substituted alkylene group, and one of the carbon atoms of said alkylene group can be replaced by an oxygen atom, a sulfur atom or -NR<sup>13</sup>- (in which R<sup>13</sup> is a hydrogen atom or an optionally substituted alkyl group), and a double bond may be formed between any adjacent atoms of said alkylene group;

5 (ii) by combining R<sup>4</sup> and R<sup>5</sup>, the formula (1') may be expressed by the formula (3'):



10 wherein R<sup>1'</sup>, R<sup>2'</sup>, R<sup>3</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and X are as defined above, Z<sup>2</sup> is an optionally substituted alkylene group, and one of the carbon atoms of said alkylene group can be replaced by an oxygen atom, a sulfur atom or -NR<sup>13</sup>- (in which R<sup>13</sup> is a hydrogen atom or an optionally substituted alkyl group), and a double bond may be formed between any adjacent atoms of said alkylene group,

15 provided that in cases other than the above (i) or (ii),  
 (1) R<sup>1'</sup> and R<sup>2'</sup> are not simultaneously a hydrogen atom,  
 (2) R<sup>1'</sup> or R<sup>2'</sup> is not a saturated heterocyclic group,  
 (3) when R<sup>1'</sup> and R<sup>2'</sup> combine together with the adjacent

20 nitrogen atom to which they bond and form a group of the formula (4), then Q is an optionally substituted o-phenylene group,

(4) R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are not simultaneously a hydrogen atom,

25 (5) when one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom or an optionally substituted alkyl group, then the remaining groups are not a hydrogen atom,

(6) when X is a sulfur atom, and one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, a nitro group, an alkyl group, a halogen-substituted alkyl group, an alkoxy group, or an 30 optionally substituted amino group, then the remaining groups are not

a hydrogen atom,

5           (7)     when X is an oxygen atom, and one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, an alkoxy group, or an optionally substituted arylcarbonyl group, and the remaining groups are a hydrogen atom, then R<sup>1'</sup> or R<sup>2'</sup> is not a hydrogen atom,

10          (8)     when X is an oxygen atom, R<sup>7</sup> is a nitro group, and R<sup>5</sup>, R<sup>6</sup> and R<sup>8</sup> are a hydrogen atom, then R<sup>1'</sup> and R<sup>2'</sup> are not simultaneously an alkyl group,

15          (9)     when X is NR<sup>10</sup>, and one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently an optionally substituted alkyl group, an optionally substituted alkoxy group, a halogen atom, or a cyano group, then the remaining groups are not a hydrogen atom,

20          (10)    when X is CR<sup>11</sup>R<sup>12</sup>, then R<sup>11</sup> and R<sup>12</sup> are independently a hydrogen atom, an alkyl group optionally substituted by a halogen atom, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group, or R<sup>11</sup> and R<sup>12</sup> combine each other and form an oxo group or =NOH, and R<sup>1'</sup> or R<sup>2'</sup> is not a hydrogen atom,  
25          or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

3.         The compound according to claim 2, wherein in cases where the formula (1') in claim 2 is not expressed by the formula (2') or the formula (3'), and further

25          (11)    when one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, an optionally substituted alkyl group, an optionally substituted pyrimidylamino group or an optionally substituted thiazolyl group, then the remaining groups are not a hydrogen atom,

30          (12)    when X is a sulfur atom, and one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, a nitro group, an alkyl group, a haloalkyl group, an optionally substituted alkoxy group, or an optionally substituted amino group, then the remaining groups are not a hydrogen atom,

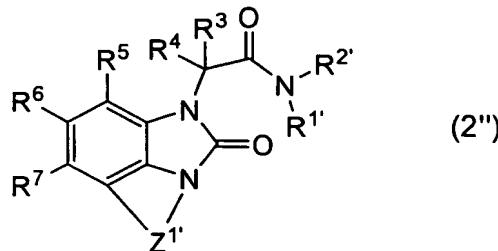
35          (13)    when X is an oxygen atom, one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, an optionally substituted alkoxy group, or an optionally substituted arylcarbonyl group, and the

remaining groups are a hydrogen atom, then R<sup>1'</sup> or R<sup>2'</sup> is not a hydrogen atom,

(14) when X is NR<sup>10</sup>, one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently an optionally substituted heteroaryl group, and the remaining groups are a hydrogen atom, then R<sup>1'</sup> or R<sup>2'</sup> is not a hydrogen atom,

or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

4. The compound according to claim 2, wherein X is NR<sup>10</sup>, and R<sup>8</sup> and R<sup>10</sup> combine each other, and thereby said compound is expressed by the formula (2''):



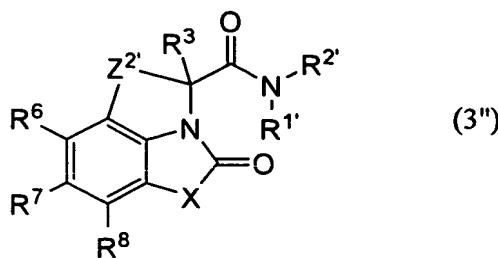
in which R<sup>1'</sup>, R<sup>2'</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are as defined in claim 2, and Z<sup>1'</sup> is an optionally substituted alkylene group, and one of the carbon atoms of said alkylene group can be replaced by an oxygen atom, a sulfur atom or -NR<sup>13</sup>- (in which R<sup>13</sup> is a hydrogen atom or an optionally substituted alkyl group),

or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

5. The compound according to claim 4, wherein at least one of R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> is -E-A (in which E and A are as defined in claim 2), or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

6. The compound according to claim 4 or 5, wherein Z<sup>1'</sup> is an optionally substituted trimethylene or tetramethylene, and one of the carbon atoms of said trimethylene and tetramethylene can be replaced by an oxygen atom, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

7. The compound according to claim 2, wherein R<sup>4</sup> and R<sup>5</sup> combine each other, and thereby said compound is expressed by the formula (3''):

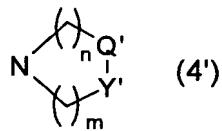


in which R<sup>1'</sup>, R<sup>2'</sup>, R<sup>3</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and X are as defined in claim 2, Z<sup>2'</sup> is an optionally substituted alkylene group, and one of the carbon atoms of said alkylene group can be replaced by an oxygen atom,  
5 or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

8. The compound according to claim 7, wherein at least one of R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> is -E-A (in which E and A are as defined in claim 2), or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

9. The compound according to claim 7 or 8, wherein Z<sup>2'</sup> is 10 an optionally substituted ethylene group, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

10. The compound according to claim 2 or 3, wherein R<sup>1'</sup> is 15 a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group, R<sup>2'</sup> is an optionally substituted alkyl group, an optionally substituted aryl group, or an optionally substituted heteroaryl group, or R<sup>1'</sup> and R<sup>2'</sup> combine together with the nitrogen atom to which they bond, and form a group of the formula (4'):



20 (in which n is 0 or 1, m is 1, 2 or 3, Y' is a single bond or an oxygen atom, and Q' is an optionally substituted o-phenylene group);

R<sup>3</sup> and R<sup>4</sup> are independently a hydrogen atom, a halogen atom, or an optionally substituted alkyl group;

25 at least one of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> is a group of the formula: -E-A (in which E and A are as defined in claim 2), or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

11. The compound according to claim 10, wherein X is an

oxygen atom or a sulfur atom, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

12. The compound according to claim 10, wherein X is NR<sup>10</sup>, and R<sup>10</sup> is a hydrogen atom or an optionally substituted alkyl group, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

13. The compound according to claim 10, wherein X is CR<sup>11</sup>R<sup>12</sup>, and R<sup>11</sup> and R<sup>12</sup> are independently a hydrogen atom, an alkyl group optionally substituted by a halogen atom, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

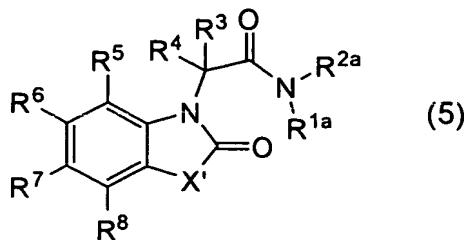
14. The compound according to claim 2 or 3, wherein R<sup>1'</sup> and R<sup>2'</sup> are a hydrogen atom or an optionally substituted alkyl group, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently an alkyl group substituted by a hydroxy group, a nitro group, a cyano group, an alkoxy group, a cycloalkyl group, an optionally substituted amino group, an alkylsulfonyl group, an arylsulfonyl group, or an optionally substituted heteroaryl group; an optionally substituted cycloalkyl group; an optionally substituted alkenyl group; an optionally substituted alkynyl group; a hydroxy group; a substituted amino group; a substituted alkoxy group; an optionally substituted alkanoyl group; an optionally substituted alkoxycarbonyl group; an optionally substituted aryloxycarbonyl group; an optionally substituted heteroaryloxycarbonyl group; a carboxyl group; an optionally substituted carbamoyl group; an aryl-substituted sulfamoyl group; an optionally substituted ureido group; an optionally substituted alkylthio group; an optionally substituted alkylsulfinyl group; an optionally substituted alkylsulfonyl group; or a group of the formula: -E-A' (in which E is a single bond, an oxygen atom, a sulfur atom, -SO-, -SO<sub>2</sub>-, -NR<sup>9</sup>- or -CO-, A' is a phenyl group substituted by a hydroxy- or amino-substituted alkyl group, a halogen-substituted alkoxy group, an alkoxycarbonyl group, a carboxyl group, an amino group (said amino group may optionally be substituted by one or two groups selected from an alkyl group, an alkanoyl group and an alkoxycarbonyl group), a carbamoyl group, an aryl group, an aryloxy group, an alkylsulfonyl group or an arylsulfonyl group; an

optionally substituted naphthyl group; or an optionally substituted heteroaryl group, R<sup>9</sup> is a hydrogen atom or an optionally substituted alkyl group), or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

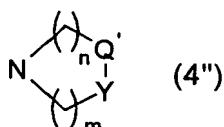
5        15.      The compound according to claim 2 or 3, wherein at least one of R<sup>1'</sup> and R<sup>2'</sup> is an aryl group (said aryl group may optionally be substituted by a halogen atom, a hydroxy group, an alkoxy group, or an alkanoyl group), X is a sulfur atom, and R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a substituted alkyl group (the substituent thereof is selected from a hydroxy group, a nitro group, a cyano group, an alkoxy group, a cycloalkyl group, an amino group, an alkylamino group, a dialkylamino group, an alkanoylamino group, an alkoxy carbonylamino group, an alkylsulfonyl group, an arylsulfonyl group, an optionally substituted aryl group and an optionally substituted heteroaryl group); an optionally substituted cycloalkyl group; an optionally substituted alkenyl group; an optionally substituted alkynyl group; a halogen atom; a cyano group; a nitro group; a hydroxy group; an optionally substituted amino group; a substituted alkoxy group; an optionally substituted alkanoyl group; an optionally substituted alkoxy carbonyl group; an optionally substituted aryloxycarbonyl group; an optionally substituted heteroaryloxycarbonyl group; a carboxyl group; an optionally substituted carbamoyl group; an optionally substituted sulfamoyl group; an optionally substituted ureido group; an optionally substituted alkylthio group; an optionally substituted alkylsulfinyl group; an optionally substituted alkylsulfonyl group; or a group of the formula: -E-A (in which E is a single bond, an oxygen atom, a sulfur atom, -SO-, -SO<sub>2</sub>-, -NR<sup>9</sup>- or -CO-, A is an optionally substituted aryl group or an optionally substituted heteroaryl group, R<sup>9</sup> is a hydrogen atom or an optionally substituted alkyl group), or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

10        16.      The compound according to claim 2 or 3, wherein at least one of R<sup>1'</sup> and R<sup>2'</sup> is an aryl group (said aryl group may optionally be substituted by a halogen atom, a hydroxy group, an alkoxy group, or an alkanoyl group), and X is an oxygen atom, NR<sup>10</sup>, or CR<sup>11</sup>R<sup>12</sup>, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

17. A compound of the formula (5):



wherein R<sup>1a</sup> is an optionally substituted alkyl group or an optionally substituted cycloalkyl group, R<sup>2a</sup> is an optionally substituted aryl group or an optionally substituted heteroaryl group, or R<sup>1a</sup> and R<sup>2a</sup> combine together with the nitrogen atom to which they bond and form a group of the formula (4''):



(in which n, m and Y are as defined in claim 2, and Q' is an optionally substituted o-phenylene group),

R<sup>3</sup> and R<sup>4</sup> are independently a hydrogen atom, a halogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group,

R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a halogen atom, a cyano group, a nitro group, a hydroxy group, an optionally substituted amino group, an optionally substituted alkoxy group, an optionally substituted alkanoyl group, an optionally substituted alkoxycarbonyl group, an optionally substituted aryloxycarbonyl group, an optionally substituted heteroaryloxycarbonyl group, a carboxyl group, an optionally substituted carbamoyl group, an optionally substituted sulfamoyl group, an optionally substituted ureido group, an optionally substituted alkylthio group, an optionally substituted alkylsulfinyl group, an optionally substituted alkylsulfonyl group, or a group of the formula: -E-A (in which E is a single bond, an

oxygen atom, a sulfur atom, -SO-, -SO<sub>2</sub>-, -NR<sup>9</sup>- or -CO-, A is an optionally substituted aryl group or an optionally substituted heteroaryl group, and R<sup>9</sup> is a hydrogen atom or an optionally substituted alkyl group), provided that R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are not simultaneously a

5 hydrogen atom,

X' is an oxygen atom, a sulfur atom, NR<sup>10</sup>, or CR<sup>11a</sup>R<sup>12a</sup> (in which R<sup>10</sup> is as defined in claim 2, R<sup>11a</sup> and R<sup>12a</sup> are independently a hydrogen atom, an alkyl group optionally substituted by a halogen atom, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group, or R<sup>11a</sup> and R<sup>12a</sup> combine and form an oxo group or =NOH),

10 provided that

(1) when X is a sulfur atom or NR<sup>10</sup>, and one or two groups of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are independently a halogen atom, an alkyl group, a trihalomethyl group, or an optionally substituted alkoxy group, then the

15 remaining groups are not a hydrogen atom,

(2) when X is an oxygen atom, then R<sup>7</sup> is not a halogen atom,

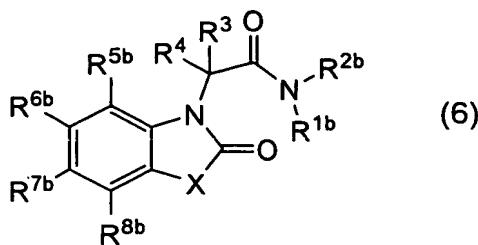
or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

20 18. The compound according to claim 17, wherein R<sup>1a</sup> is an optionally substituted alkyl group or an optionally substituted cycloalkyl group, R<sup>2a</sup> is an optionally substituted aryl group or an optionally substituted heteroaryl group, and at least one of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> is a group of the formula: -E-A (in which E and A are as defined in claim 2), or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

25 19. The compound according to claim 18, wherein E is a single bond, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

30 20. The compound according to claim 17, wherein R<sup>1a</sup> is an optionally substituted alkyl group, R<sup>2a</sup> is an optionally substituted aryl group or an optionally substituted heteroaryl group, and R<sup>6</sup> and/or R<sup>8</sup> are a halogen atom, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

35 21. A compound of the formula (6):



wherein R<sup>1b</sup> and R<sup>2b</sup> are independently a substituted alkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group,

5        R<sup>3</sup> and R<sup>4</sup> are as defined in claim 2,

R<sup>5b</sup>, R<sup>6b</sup>, R<sup>7b</sup> and R<sup>8b</sup> are independently a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a halogen atom, a cyano group, a nitro group, a hydroxy group, an optionally substituted amino group, an optionally substituted alkoxy group, an optionally substituted alkanoyl group, an optionally substituted alkoxy carbonyl group, an optionally substituted aryloxycarbonyl group, an optionally substituted heteroaryloxycarbonyl group, a carboxyl group, an optionally substituted carbamoyl group, an optionally substituted sulfamoyl group, an optionally substituted ureido group, an optionally substituted alkylthio group, an optionally substituted alkylsulfinyl group, an optionally substituted alkylsulfonyl group, or a group of the formula: -E-A<sup>b</sup> (in which E is as defined in claim 2, A<sup>b</sup> is a substituted phenyl group (the substituent thereof is selected from a halogen atom, an alkyl group substituted by a hydroxy group or an optionally substituted amino group, a halogen-substituted alkoxy group, an alkoxy carbonyl group, a carboxyl group, an amino group (said amino group being optionally substituted by one or two groups selected from an alkyl group, an alkanoyl group, an alkoxy carbonyl group, etc.), a carbamoyl group, an aryl group, an aryloxy group, an alkylsulfonyl group and an arylsulfonyl group); an optionally substituted naphthyl group; or an optionally substituted heteroaryl group), and at least one of R<sup>5b</sup>, R<sup>6b</sup>, R<sup>7b</sup> and R<sup>8b</sup> is a group of the formula: -E-A<sup>b</sup>,

30        X is an oxygen atom, a sulfur atom, NR<sup>10</sup>, or CR<sup>11b</sup>R<sup>12b</sup> (in

which R<sup>10</sup> is as defined in claim 2, R<sup>11b</sup> and R<sup>12b</sup> are independently a hydrogen atom, an alkyl group optionally substituted by a halogen atom, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, or an optionally substituted alkynyl group, or R<sup>11b</sup> and R<sup>12b</sup> combine to form an oxo group or =NOH),  
5 or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

22. A drug comprising as the active ingredient the compound as set forth in any one of claims 2 to 21, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.

10 23. An antianxiety or antidepressant agent comprising as the active ingredient the compound as set forth in any one of claims 2 to 21, or a prodrug thereof, or a pharmaceutically acceptable salt thereof.